

Strategic Goal: Clean and Safe Water

All Americans will have drinking water that is clean and safe to drink. Effective protection of America's rivers, lakes, wetlands, aquifers, and coastal and ocean waters will sustain fish, plants, and wildlife, as well as recreational, subsistence, and economic activities. Watersheds and their aquatic ecosystems will be restored and protected to improve public health, enhance water quality, reduce flooding, and provide habitat for wildlife.

BACKGROUND AND CONTEXT

Safe and clean water is needed for drinking, recreation, fishing, maintaining ecosystem integrity, and commercial uses such as agricultural and industrial production. Our health, economy, and quality of life depend on reliable sources of clean and safe water. Waterfowl, fish, and other aquatic life that live in and on the water, as well as plants, animals, and other life forms in terrestrial ecosystems are dependent on clean water.

While the nation has made considerable progress over the past 25 years, some waters still do not meet current Clean Water Act standards. The National Water Quality Inventory 1996 Report to Congress indicates that 16 percent of assessed rivers and streams

and 35 percent of assessed lake acres are not safe for fish consumption; 20 percent of assessed rivers and streams and 25 percent of lake acres are not safe for recreational activities (e.g, swimming); and 16 percent of assessed rivers and streams and 8 percent of lake acres are not meeting drinking water uses. Many of the remaining challenges require a different approach to environmental protection because they are not amenable to traditional end-of-pipe pollution controls. These problems derive from the activities of people in general. EPA must motivate people to be responsible in their day-to-day decisions that can affect the quality of their rivers, streams, lakes, wetlands, and estuaries.

MEANS AND STRATEGY

To help achieve the nation's clean and safe water goals, EPA will expand implementation of the watershed approach in carrying out its statutory authorities under the Safe Drinking Water Amendments of 1996 and the Clean Water Act. Protecting watersheds involves participation by a wide variety of stakeholders, a comprehensive assessment of the condition of the watershed, and implementation of solutions based on the assessment of conditions and stakeholder input. Full involvement of stakeholders at all levels of government, the regulated community, and the public are fundamental to the watershed approach. The watershed approach helps EPA, its federal

partners, states, tribes, local governments, and other stakeholders to implement tailored solutions and maximize the benefits gained from the use of increasingly scarce resources.

EPA will continue to implement the Safe Drinking Water Act Amendments of 1996 which charted a new and challenging course for EPA, states, tribes, and water suppliers. One of the central provisions of the Amendments that remains an EPA priority is significantly strengthening the source water protection program, which builds directly on the watershed approach. Other provisions that EPA will continue to support include

establishing drinking water safety standards, which place emphasis on microbiological contaminants, disinfectant and disinfection byproducts (DBPs), and other pollutants identified as posing potentially high risks; capitalizing and managing the drinking water state revolving fund (DWSRF) program to assist public water systems in meeting drinking water standards; providing assistance to small systems to build or strengthen technical, managerial, and financial capacity; establishing an operator certification program; and providing Aright-to-know reports for all customers of public water systems.

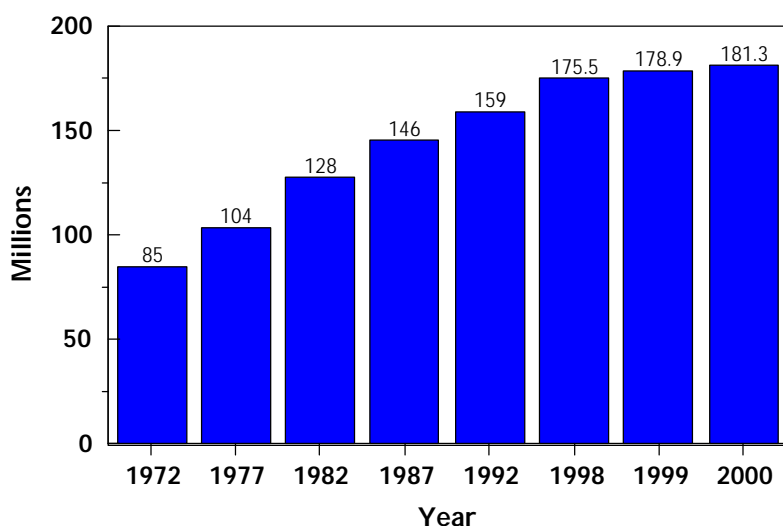
pollution indicators so that local authorities can monitor their recreational waters in a cost-effective way and close them to public use when necessary to protect human health. For beaches, EPA's three-part strategy is to strengthen beach standards and testing, improve the scientific basis for beach assessment, and develop methods to inform the public about beach conditions.

Under the Clean Water Act, EPA will continue to develop scientifically-based water quality standards and criteria and work with its partners to apply them on a watershed basis. EPA will work

with states and tribes to improve implementation of total maximum daily load (TMDL) programs that establish the analytical basis for watershed-based decisions on the need for additional pollution reductions where standards are not being met. EPA will continue to develop and revise national effluent guideline limitations and standards, capitalize and manage the Clean Water State Revolving Fund (CWSRF) program and other funding mechanisms, and streamline the National Pollutant Discharge Elimination System (NPDES) permit program. The Agency will continue implementing its strategy for reducing the NPDES permit backlog. The Agency, in

partnership with States, will develop strategies that target permitting activities toward those facilities posing the greatest risk to the environment. This is particularly important because the NPDES program will be expanded with the completion of the phase II storm water rule, new strategy for animal feeding operations and coverage of additional wet-weather sources contributing to pollution problems. EPA will also continue reorienting all its point source programs to focus and coordinate efforts on a watershed basis.

U.S. POPULATION SERVED BY SECONDARY TREATMENT OR BETTER



EPA has increased its efforts to provide states and tribes tools and information to assist them in protecting their residents from health risks associated with contaminated recreational waters and non-commercially caught fish. These tools will help reduce health risks, including risks to sensitive populations such as children and subsistence and recreational anglers. EPA activities include development of criteria, enhanced fish tissue monitoring, risk assessment, and development of fish and shellfish consumption advisories. EPA will also establish improved safety guidelines and

The CWSRF is a significant financial tool for achieving clean and safe water and for helping to meet the significant needs for wastewater infrastructure over the next 20 years. With approximately \$16 billion worth of capitalization grants (which is almost 90%, which is more than originally authorized by Congress) all 50 states and U.S. territories have benefited from this and other wastewater funding. To further support the objectives of the Clean Water Action Plan, the Agency proposes for FY 2000 to allow states to reserve up to an amount equal to 20% of their CWSRF capitalization grants to provide grants of no more than 60% of the costs of implementing nonpoint source and estuary management projects. Such grant funds may not be used for publicly-owned treatment works projects. Projects receiving grant assistance must, to the maximum extent practicable, rank highest on the State list used to prioritize projects eligible for assistance. States may make these grants using either a portion of their capitalization grant itself, or using other funds in their state revolving fund (e.g., state match, repayments, bond proceeds). Grants may also be used with loans for eligible projects for communities which might otherwise find loans unaffordable.

EPA has stepped up efforts to engage a variety of stakeholders to reduce nutrients, pathogens, and other pollutants from nontraditional categories of point sources, including animal feeding operations, storm water drains, sanitary sewer overflows, and combined sewer overflows.

EPA is assisting states and tribes to characterize risks, rank priorities, and implement a mix of voluntary and regulatory approaches through state nonpoint source management programs. State and tribal nonpoint source programs are being strengthened to ensure that beneficial uses of water are achieved and maintained. States will continue to implement coastal nonpoint source programs approved by EPA and the National Oceanic and Atmospheric Administration under the Coastal Zone

Act Reauthorization Amendments, and to work with the U.S. Department of Agriculture to promote implementation of Farm Bill programs consistent with state nonpoint source management needs and priorities. EPA will also provide tools to states to assess and strengthen controls on air deposition sources of nitrogen, mercury, and other toxics.

With respect to wetlands, EPA will work with federal, state, tribal, local, and private sector partners on protection and community-based restoration of wetlands, and with its federal partners to avoid, minimize, and compensate for wetland losses through the Clean Water Act Section 404 and Farm Bill programs.

The President's Clean Water Action Plan, announced in February 1998, calls for more than 100 specific key actions by EPA and by many other federal agencies with either water quality responsibilities or activities that have an impact on water quality. These key actions cover most aspects of the water program at EPA. The Action Plan mobilizes federal, state, and local agencies to achieve the nation's clean water goals through the watershed approach, brings a sharp focus to the critical actions that are required, and establishes deadlines for meeting these commitments over the next several years.

Under the Clean Water Action Plan in 2000, watershed restoration action strategies will be completed in high priority watersheds across the nation that will enable local leaders to take a stronger role in setting priorities and solving water quality problems that affect the quality of life in their communities. States will finish upgrading their nonpoint source management programs to fully incorporate all nine key elements of a comprehensive solution to polluted runoff problems and coastal states will submit final plans with policies and mechanisms to reduce polluted runoff in coastal areas. EPA will work with states, tribes, municipalities, and the regulated community to ensure that the Phase II rules for the stormwater

program are implemented to solve problems caused by sediment and other pollutants in our waters. EPA will also establish criteria for nutrients (i.e. nitrogen and phosphorus) so that states can start developing water quality standards for nutrients to protect waters from harmful algal blooms, dead zones, and fish kills.

Research

EPA's research efforts will continue to strengthen the scientific basis for drinking water standards through the use of improved methods and new data to better evaluate the risks associated with exposure to chemical and microbial contaminants in drinking water. To support the Safe Drinking Water Act (SDWA) and its 1996 Amendments, the Agency's drinking water research will develop dose-response information on DBPs, waterborne pathogens, arsenic and other drinking water contaminants for characterization of potential exposure risks from consuming tap water, including an increased focus on filling key data gaps and developing methods for chemicals and microbial pathogens on the Contaminant Candidate List (CCL). The Agency will develop and evaluate cost-effective treatment technologies for removing

pathogens from water supplies while minimizing DBP formation, and for maintaining the quality of treated water in the distribution system and preventing the intrusion of microbial contamination.

Research to support the development of ecological criteria will improve our understanding of the structure, function and characteristics of aquatic systems, and will evaluate exposures to stressors and their effects on those systems. This research can then be used to improve risk assessment methods to develop aquatic life, habitat, and wildlife criteria. The Agency also will develop cost effective technologies for managing contaminated sediments with an emphasis on identifying innovative in situ solutions. EPA will continue to develop diagnostic tools to evaluate the exposures to toxic constituents of wet weather flows, and develop and validate effective watershed management strategies for controlling wet weather flows, especially when they are high volume and toxic. This research will also develop effective beach evaluation tools necessary to make timely and informed decisions on beach advisories and closures.

EXTERNAL FACTORS

Drinking Water and Source Water

The Safe Drinking Water Act (SDWA) Amendments of 1996 comprise one of the first environmentally-focused statutes to establish not only regulatory, programmatic, enforcement, and management/administration provisions to ensure that safe drinking water is available nationwide, but also an outreach process to involve all stakeholders in the development and implementation of the statutory provisions. To date, this extensive stakeholder involvement has had major benefits on the Agency's efforts in implementing the 1996 SDWA amendments. To listen to the comments and reactions of our stakeholders, to incorporate their views, to keep the process moving and to focus on the fact that our mutual goal is public health protection has taken the meaning of partnership to a new level in the drinking water and ground water program. The complexity of upcoming regulations and the time-consuming process of gaining consensus with stakeholders pose challenges in implementing the 1996 SDWA amendments.

The adoption of health-based and other programmatic regulations by the states is another area of concern. Since states have primary enforcement authority (primacy) for drinking water regulations, it is critical that the states have sufficient staff and resources to work with public water systems to ensure that they are implementing and complying with the new regulations. To help them with these efforts, EPA has increased PWSS grant funding by approximately 60% since FY 1993. EPA is investing substantially in areas to provide technical assistance and training to the states on the small systems variances and exemptions and the consumer confidence report rules promulgated in 1998 as well as the health-based, microbial regulations that will be promulgated early in 1999.

The Clean Water Action Plan (CWAP) provides a blueprint for a cooperative approach to restoring and protecting water quality in which Federal, state, tribal, and local governments work collaboratively to focus resources and implement effective strategies. A key element of the CWAP is the integration of public health goals with aquatic ecosystem goals when identifying watershed priorities. To help facilitate a comprehensive framework, Federal agencies involved in water quality initiatives are asked to direct "program authorities, technical assistance, data and enforcement resources to help states, tribes, and local communities design and implement their drinking water source water assessment and protection programs within the unified watershed protection and restoration efforts..." (Clean Water Action Plan, page 29).

Although EPA expects participating Federal agencies to sign a Federal Agency Agreement that has been developed for this aspect of the CWAP, the Agency has minimal ability to ensure that these agencies work aggressively to promote source water assessment and protection activities. EPA staff will devote substantial "front-end" time in the negotiation of this agreement with pertinent Federal agencies early in 1999 so as to maximize the expected benefits that are reflected in the year 2000 drinking water and ground water annual performance goals.

Fish and Recreational Waters

The Agency's success in protecting human health from consumption of contaminated fish or exposure to contaminated recreational waters could be compromised by several major constraints, including lack of regulatory authority, inability to measure behavior, and lack of state and local resources.

The Clean Water Act does not require that states or tribes operate fish advisory or beach protection programs. The Agency's role is primarily to support them through guidance, scientific information, and technical assistance. EPA can not take regulatory action to assure that states and tribes conform to guidance; therefore, success depends on state/tribal/local commitment to achieving these goals.

One way of determining whether we have reduced the consumption of contaminated fish and shellfish is to find out if people eat the fish they catch from waters where fish advisories have been issued. In order to determine whether we have reduced exposure to contaminated recreational waters, we also need to know if people comply with beach closure notices when they are issued.

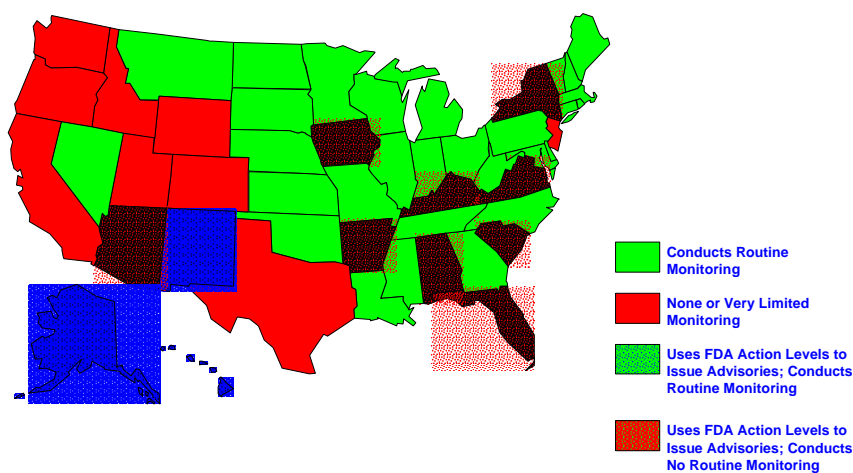
Acquiring statistical evidence for such determinations is difficult.

Without comprehensive, consistent monitoring of all the Nation's waters, we do not know how many waters should be under advisory or how many beaches should be closed. This expensive and time-consuming task is beyond the resources of most states.

Watersheds and Wetlands

EPA's efforts to meet our watershed protection objective are predicated on the continuation and improvement of relationships with our Federal, state, tribal, and local partners. Because of the vast geographic scope of water quality and wetlands impairments and the large number of partners upon

STATE FISH ADVISORY PROGRAMS METHODS AND MONITORING EFFORT



NOTE: Many States have active advisories based on previous assessments using FDA Action Levels

SOURCE: State Responses to USEPA 1997 National Listing of Advisories Questionnaire

whose efforts we depend, we must continue to build strong and lasting relationships with all levels of government, the private sector, research community, and interest groups. Success in meeting our wetlands objectives is particularly dependent on the continuing and enhanced cooperation with the Army Corps of Engineers, Fish and Wildlife Service, National Marine Fisheries Service, and the Natural Resources Conservation Service.

The Clean Water Action Plan development process underscored the interrelations of the Federal government's environmental protection and stewardship agencies and programs, and the critical importance of working together to maximize achievements. Without continued government-wide coordination and financial commitment to the Plan's implementation, we may not meet our water quality objectives. This is particularly true for successful enhancement of state nonpoint source management programs. The states will also need to continue efforts to overcome historical institutional barriers to achieve full implementation of their coastal nonpoint pollution control programs as required under the Coastal Zone Act Reauthorization Amendments (CZARA).

Fundamental to all of the Agency's efforts to meet this objective is managing water quality resources on a watershed basis, with full involvement of all stakeholders including communities, individuals, business, state and local governments and tribes. EPA's ability to meet this objective will depend on the success of regulatory and non-regulatory programs and nationwide efforts to provide and use a broad range of policy, planning, and scientific tools to establish local goals and assess progress.

In addition, we must continue to improve our understanding of the environmental baseline and our ability to track progress against goals, which also depends on external parties. While the Index of Watershed Indicators and state 305(b) reporting provide reasonable and defensible assessments of

water quality, we will continue to depend upon and provide support to our partners and stakeholders in their efforts to improve measurement tools and capabilities. EPA recognizes that better performance goals are needed to measure nonpoint source loadings. In 1999, EPA will work with Federal and state agencies to develop both near term and long term environmental outcome measures for nonpoint source loadings reductions.

Point and Nonpoint Sources

States and localities are assumed to be able to continue to raise sufficient funds for construction of necessary wastewater treatment and control facilities. This is especially critical for new regulated sources like storm water and CSOs. In addition they must be able to maintain sufficient programmatic funds to continue to effectively manage point source programs.

It is assumed that states will effectively strengthen and implement improved nonpoint source programs consistent with their commitments in this area. Federal agencies must work together and fulfill their mutual commitments under their Strategic Plans and the Clean Water Action Plan (CWAP) if we are to succeed in addressing nonpoint source (NPS) needs. No one Agency can succeed in NPS management without the partnership efforts of a wide range of Federal, state, local and private sector interests.

In support of the objectives of the Clean Water Action Plan, the Agency is proposing language to allow states to reserve up to an amount equal to 20% of their Clean Water State Revolving Fund capitalization grants to provide grants of no more than 60% of the costs of nonpoint source and estuary management projects. Projects receiving grant assistance must, to the maximum extent practicable, rank highest on the State's list used to prioritize projects eligible for assistance. States may make these grants using either a portion of their capitalization grant itself, or using other funds in their state revolving fund (e.g., state match,

repayments, bond proceeds). Grants may also be used with loans for eligible projects for communities which might otherwise find loans unaffordable. To assist tribes in addressing polluted runoff, EPA

proposes in 2000 to eliminate the current statutory ceiling on the percentage of Section 319 grant funds that may be awarded to tribes/tribal consortia.

Resource Summary

(Dollars in Thousands)

	FY 1999 Enacted	FY 2000 Request	FY 2000 Req. v. FY 1999 Enacted
Clean and Safe Water			
Safe Drinking Water, Fish and Recreational Waters	\$1,092,624.2	\$1,079,342.0	(\$13,282.2)
Environmental Program & Management	\$110,067.7	\$106,421.3	(\$3,646.4)
Science & Technology	\$49,847.0	\$43,640.2	(\$6,206.8)
State and Tribal Assistance Grants	\$932,709.5	\$929,280.5	(\$3,429.0)
Conserve and Enhance Nation's Waters	\$339,236.8	\$311,444.1	(\$27,792.7)
Environmental Program & Management	\$166,215.1	\$141,940.0	(\$24,275.1)
Science & Technology	\$19,492.4	\$19,974.8	\$482.4
State and Tribal Assistance Grants	\$153,529.3	\$149,529.3	(\$4,000.0)
Reduce Loadings and Air Deposition	\$1,986,478.7	\$1,160,583.1	(\$825,895.6)
Environmental Program & Management	\$133,781.6	\$123,891.1	(\$9,890.5)
Science & Technology	\$8,376.1	\$8,692.0	\$315.9
State and Tribal Assistance Grants	\$1,844,321.0	\$1,028,000.0	(\$816,321.0)
Total Workyears:	2,495.1	2,522.0	26.9

Strategic Objectives: Safe Drinking Water, Fish and Recreational Waters

By 2005, protect public health so that 95% of the population served by community water systems will receive water that meets drinking water standards, consumption of contaminated fish and shellfish will be reduced, and exposure to microbial and other forms of contamination in waters used for recreation will be reduced.

Key Programs

(Dollars in thousands)

	FY 1999 Enacted	FY 2000 Request
Drinking Water Regulations	\$33,886.2	\$43,484.9
Drinking Water Implementation	\$31,688.0	\$31,803.8
UIC Program	\$11,744.7	\$11,815.9
Rural Water Technical Assistance	\$9,955.0	\$232.0
State PWSS Grants	\$93,780.5	\$93,780.5
State Underground Injection Control Grants	\$10,500.0	\$10,500.0
Source Water Protection (CWAP-Related)	\$11,685.8	\$11,501.9
Water Infrastructure:Drinking Water State Revolving Fund (DW-SRF)	\$775,000.0	\$825,000.0
Safe Drinking Water Research	\$47,728.1	\$41,468.2
EMPACT	\$1,290.7	\$476.4
Project XL	\$390.5	\$0.0

Annual Performance Goals and Measures

DRINKING WATER HEALTH STANDARDS

In 2000 91% of the population served by community drinking water systems will receive drinking water meeting all health-based standards that were in effect as of 1994, up from 83% in 1994.

In 1999 89% (an increase of 1% over 1998) of the population served by community water systems will receive drinking water meeting all health-based standards in effect as of 1994, up from 83% in 1994.

Performance Measures:	FY 1999	FY 2000
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Population served by CWSs that will receive drinking water for which Population there have been no violations during the year of any federally-enforceable health-based standards that were in place by 1994.	89 % Population	91 %
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Baseline: In 1994, 83% of the population that was served by community water systems received drinking water meeting all health-based standards. Note that a recent recalculation of the baseline for 1994, has resulted in a baseline that is 2% higher than that reported in the FY99 Presidential Budget.

RULES FOR HIGH-RISK CONTAMINANTS

In 1999 EPA will issue and begin implementing two protective drinking water standards for high-risk contaminants, including disease-causing micro-organisms (Stage I Disinfection/Disinfection Byproducts and Interim Enhanced Surface Water Treatment Rules).

Performance Measures:	FY 1999	FY 2000
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Regulations promulgated that establish protective levels for high-risk contaminants	2 Rules	
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Baseline: Since these are new regulations, no baseline is available.

PROTECTING SOURCE WATER

In 1999 4,400 community water systems will be implementing programs to protect their source water (an increase of 1,650 systems over 1998).

Performance Measures:	FY 1999	FY 2000
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CWSs with ground or surface water protection programs in place	4,400 CWSs	
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Baseline: In 1998, 2,750 community water systems (serving 12 million people) implemented programs to protect their source water resources. By September 1998, 1 state was implementing its EPA-approved source water protection assessment program. EPA is currently working with its state partners to define multiple barrier approach and to identify the programs to be included in this approach. Once this definition is final a baseline can be set for the current number of CWSs implementing a multiple barrier approach to prevent drinking water contamination. This definition should be final and the baseline set by September 1999.

INCREASE INFORMATION ON FISH AND BEACHES

In 2000 Reduce consumption of contaminated fish and exposure to contaminated recreational waters by increasing the information available to the public and decision-makers. (Supports CWAP)

Performance Measures:	FY 1999	FY 2000
Fish tissue samples collected.		500 Samples
High-use coastal beaches for which data is entered into the public right-to-know database on beach monitoring and closures.		500 Beaches
Number of digitized maps entered into the public right-to-know database on beach monitoring and closures.		150 Maps

Baseline: EPA data is not currently available on beach monitoring and closures, however, the Agency is beginning to compile data on beach monitoring and actions taken to protect the public from contamination in these recreational waters. The state/local government survey, which will be the key piece of information used to report progress, will be phased in to obtain data on all beaches. The baseline is 250 fish tissue samples will be collected by September 1999. By September 2000, the cumulative total will be 750 samples.

Research

SAFE DRINKING WATER RESEARCH (DBPs)

In 2000 Reduce uncertainties and improve methods associated with the evaluation and control of risks posed by exposure to disinfection by-products in drinking water

In 1999 EPA will develop critical dose-response data for disinfectant by-products (DBPs), waterborne pathogens, and arsenic for addressing key uncertainties in the risk assessment of municipal water supplies.

Performance Measures:	FY 1999	FY 2000
Data on first city study on microbial enteric disease.	30-SEP-1999	
Complete hazard i.d./screening studies on reproductive/developmental effects of selected DBPs.	30-SEP-1999	
Performance Measures:	FY 1999	FY 2000

Report assessing the feasibility of attaining/constructing refined DBP exposure information for extant epidemiologic drinking water studies. 1 report

Report on the identification of new DBPs in drinking water formed by alternative disinfectants. 1 report

Complete a peer-reviewed report on the impacts of mixtures of selected DBPs on cancer and various noncancer endpoints, including reproduction and developmental effects, from animal studies. 1 report

Baseline: It has been recently discovered that minute concentrations of halogenated disinfection by-products (DBPs) are produced with chlorine disinfection reactions. These DBP compounds might have long term health effects. Alternative disinfection technologies like ozone and chlorine dioxide produce fewer or no chlorinated DBPs and have been proposed as chlorine alternatives. However, these alternatives will also produce potentially, undesirable chemical by-products that need characterization and identification so that informed risk management decisions are made. For example, disinfection with ozone produces various aldehydes, ketones, and most notably an increase in brominated by-product compounds. The bromated compounds are currently suspected of having carcinogenic and reproductive health risks. The numbers and variety of aldehydes and ketones are largely unidentified and therefore risks are also unknown.

SAFE DRINKING WATER RESEARCH (MICROBIALS)

In 2000 Reduce uncertainties and improve methods associated with the evaluation and control of risks posed by exposure to microbial contaminants in drinking water

Performance Measures:	FY 1999	FY 2000
Report on waterborne disease outbreaks in the U.S.		1 report
Evaluation of Method 1622 for <i>Cryptosporidium</i> for use in the Information Collection Rule.		1 evaluation
Describe different technologies for cost/effective control of <i>Cryptosporidium</i> oocysts and DBPs.		09/30/2000

Baseline: There are many small drinking water systems that do not have adequate treatment to control microorganisms, especially *Cryptosporidium* oocysts, and disinfection byproducts placing thousands of people at risk (i.e., *Cryptosporidium* waterborne outbreaks, exposure to suspected carcinogenic trihalomethanes [e.g., chloroform]). Research is being conducted at bench and pilot-scale to evaluate various treatment technologies such as membranes, bag filtration, slow package slow sand filtration, and package disinfection. Previously unknown operating capital costs and performance data will be provided to utilities for assisting the selection of cost-effective control technologies for small and medium sized plants.

VERIFICATION AND VALIDATION OF PERFORMANCE MEASURES

The Safe Drinking Water Information System (SDWIS) is the primary data source for verifying and validating the performance measures related to the objective of enhancing public health through safe drinking water. There are two components to SDWIS. SDWIS/FED is a national data base (housed on a mainframe computer) that includes the core information needed by EPA to assure that public water systems are in compliance with all of the statutory requirements in SDWA. This core information includes: inventory data on over 170,000 public water systems¹ nationwide, violations of both health-based standards and monitoring requirements by these systems, enforcement actions taken against systems by the state or EPA, and sampling results for both regulated and unregulated contaminants in these public water systems. SDWIS/ STATE is a PC-based system at the state level that has been designed to address the specific drinking water information needs of the state. It includes not only the data that the state must report to SDWIS/FED but also data the state determines to be critical to carry out its primary enforcement authority.

Formal quality assurance/quality control (QA/QC) procedures have been implemented for both data entry and data retrieval. The Agency has a laboratory certification program to ensure that there is a consistent approach and method for collecting and analyzing public water supplies' samples for regulated/unregulated contaminants. In addition, the Agency itself conducts or supports sanitary survey studies of public water utilities,

performs data verification (audits) and management reviews, and provides extensive technical assistance and training on QA/QC measures. The SDWIS Executive Board reviews QA/QC approaches regularly and a peer review process is in place to test any new modules or revisions to existing modules of SDWIS. The Agency is continually working to improve data quality and has initiated action in this area through the implementation of a Data Reliability Action Plan. The focus of this Action Plan is to analyze the overall reliability of the data in SDWIS and initiate actions to address any problems that may found. This Action Plan and the Agency's ongoing stakeholder process for review of data quality are fundamental to the drinking water program as data collection, verification, quality and control are very important aspects for measuring how well EPA is achieving its annual as well as longer-term strategic objectives.

Data will also be compiled on efforts to implement the underground injection control program, including performance data on mechanical integrity testing of UIC wells and permitting and closure efforts targeted at Class IV and V wells. EPA will collect this data from the UIC Federal Reporting System (7520 forms), which includes information submitted annually by EPA and state UIC Program Directors to Headquarters. A national workgroup, composed of EPA Headquarters and Regional staff and state officials, is reviewing the current UIC approach to collecting data, which uses outmoded methods as completing forms and submitting them in hard copy to Headquarters or incompatible PC programs such as *Professional File* and *D-base*. This workgroup is charged with the design of a new user-friendly PC-based system that will be used by the UIC community (Headquarters, Regions, states) and will focus on the collection and analysis of data that are environmental and performance components of the UIC programs. The new data system will have QA/QC procedures built into its collection, maintenance, processing, and reporting. Both the

¹Public Water Systems (PWSs) provide piped water for human consumption to at least 15 service connections (such as households, businesses or schools), or serve an average of at least 25 people at least 60 days per year. PWSs can be community (water is provided to the same population year round), non-transient non-community (serves at least 25 of the same people at least six months of the year, e.g., schools, factories, hospitals) and transient (caters to transitory customers in non-residences such as campgrounds, motels and gas stations).

implementation of the Government Performance and Results Act and the expected promulgation and implementation of Class V rule are the catalysts for the development of a new and improved UIC data system.

The National Listing of Fish and Wildlife Advisories database is the primary data source for the performance measures related to safe consumption of fish and wildlife. Each year, states and tribes submit information that the Agency enters into the database and validates. The database contains information on the water bodies under advisory, the types of advisories and bans in place, the special category and size ranges of fish and/or wildlife involved, chemical contaminants identified in the advisories, lake acreage or river miles under advisory, the date advisories were issued, and the proportion of assessed waters that are under advisory in a given year. Data submitted by states and tribes on the proportion of assessed waters under advisory will be used to help EPA calculate the performance measure. Additional data will help the Agency assess program performance in more detailed areas such as specific types of waters under advisory and/or assessed or specific pollutants.

While states and tribes are assuring that the information they submit is accurate, the Agency provides detailed guidance on how to assure that monitoring and sampling procedures are consistent and accurate. It is important to note that the FY 2000 measure does not directly address the Agency's goal of reducing consumption of contaminated fish. It represents an interim program goal of increasing the overall proportion of waters that are assessed to see if fish consumption advisories are necessary. In the short-term, then, we would expect that the number and area covered by fish advisories would increase. In the long-term, as our understanding of the scope of the problem increases, the Agency will strive to assist states and tribes in reducing consumption of contaminated fish through both advisories and remedial efforts.

EPA data are not currently available on beach monitoring and closures. However, the Agency

issued an Information Collection Request (ICR) to solicit data on beach monitoring and actions taken to protect the public from contamination in these recreational waters. The state/local government survey that has been developed as a result of the ICR is the key piece of information used to report progress. Information gathered through the EPA survey will be phased in to obtain data on all beaches.

The survey will be designed to report all information necessary to measure progress against the annual performance measure goal. The survey instrument was developed through extensive external consultations, although it did not undergo a formal peer review. The database being developed to store the information is consistent with all EPA standard operating procedures and requirements. The database will not contain detailed monitoring or water quality data. Rather, it will contain information on specific beach advisory and closure activities performed by states, tribes, and local governments. The Agency's beach monitoring program is undergoing the scientific peer review process.

Research

EPA has several strategies to validate and verify performance measures in the area of environmental science and technology research. Because the major output of research is technical information, primarily in the form of reports, software, protocols, etc., key to these strategies is the performance of both peer reviews and quality reviews to ensure that requirements are met.

Peer reviews provide assurance during the pre-planning, planning, and reporting of environmental science and research activities that the work meets peer expectations. Only those science activities that pass agency peer review are addressed. This applies to program-level, project-level, and research outputs. The quality of the peer review activity is monitored by EPA to ensure that peer reviews are performed consistently, according to Agency policy, and that any identified areas of concern are resolved

through discussion or the implementation of corrective action.

The Agency's expanded focus on peer review helps ensure that the performance measures listed here are verified and validated by an external organization. This is accomplished through the use of the Science Advisory Board (SAB) and the Board of Scientific Counselors (BOSC). The BOSC, established under the Federal Advisory Committee Act, provides an added measure of assurance by examining the way the Agency uses peer review, as well as the management of its research and development laboratories.

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STATUTORY AUTHORITIES

Safe Drinking Water Act

Clean Water Act

Toxic Substances Control Act

Strategic Objective: Conserve and Enhance Nation's Waters

By 2005, conserve and enhance the ecological health of the nation's (state, interstate, and tribal) waters and aquatic ecosystems -- rivers and streams, lakes, wetlands, estuaries, coastal areas, oceans, and ground waters-- so that 75 % of waters will support healthy aquatic communities.

Key Programs

(Dollars in thousands)

	FY 1999 Enacted	FY 2000 Request
Water Quality Criteria and Standards (CWAP)	\$17,842.5	\$22,280.7
Wetlands (CWAP)	\$16,110.6	\$18,124.5
National Estuaries Program/Coastal Watersheds (CWAP)	\$16,544.3	\$17,048.8
South Florida/Everglades (CWAP)	\$3,099.3	\$3,084.6
Chesapeake Bay (CWAP)	\$19,630.1	\$18,899.3
Great Lakes (CWAP)	\$5,381.6	\$4,366.3
Gulf of Mexico (CWAP)	\$3,798.9	\$4,290.6
Long Island Sound (CWAP)	\$900.0	\$500.0
Pfisteria (CWAP)	\$2,500.0	\$500.0
Pacific Northwest (CWAP)	\$713.6	\$823.9
Lake Champlain (CWAP)	\$2,000.0	\$1,000.0
State Pollution Control Grants (Section 106) (CWAP)	\$115,529.3	\$115,529.3
State Water Quality Cooperative Agreements (CWAP)	\$19,000.0	\$19,000.0
State Wetlands Program Grants (CWAP)	\$15,000.0	\$15,000.0
Clean Water Action Plan-Related Research	\$0.0	\$1,855.1
EMPACT	\$649.2	\$0.0

Annual Performance Goals and Measures

CLEAN WATER ACTION PLAN IMPLEMENTATION

In 1999 As part of the Clean Water Action Plan, all states will be conducting or have completed unified watershed assessments, with support from EPA, to identify aquatic resources in greatest need of restoration or prevention activities.

Performance Measures:	FY 1999	FY 2000
States that are conducting or have completed unified watershed assessments	50 States	

Baseline: FY 2000 will be the first time that a Watershed Restoration Progress Report is submitted to the President, therefore, there is no baseline. States submit 303(d) lists every 2 years; as of January 1999, 47 states had submitted their 1998 lists. The 1998 303(d) list submissions from the states are under review to determine the national total of TMDLs scheduled to be developed and the number currently under establishment. Of those TMDLs scheduled to be developed on the 1998 303(d) lists, none have been submitted, established, nor approved. The States and Tribes are still in the process of submitting the first round of Watershed Restoration Action Strategies. Once these strategies are submitted, they will be analyzed to determine the number of assessed river miles, lake acres, and estuary square miles that are covered by the strategies. For any given reporting period the baseline for waters restored to their designated uses during the reporting period starts at zero. Once implementation of the Watershed Restoration Action Strategies starts to result in waters restored to their designated uses, a baseline can be established to compare one reporting period to another. FY2000 will be the first time that this measure will be applied.

STATE/TRIBAL WATER QUALITY STANDARDS

In 2000 Assure that States and Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.

Performance Measures:	FY 1999	FY 2000
States with new or revised water quality standards that EPA has reviewed and approved or disapproved.	15 States	15 States
Tribes with water quality standards adopted and approved	17 Tribes	22 Tribes

Baseline: State water quality standards program reviews are under a 3-year cycle as mandated by the Clean Water Act under which all states maintain updated water quality programs; therefore, the Agency will review approximately one-third of all state/tribal programs each year. At the end of FY 1998, 14 tribes had adopted and approved water quality standards.

CLEAN WATER ACTION PLAN: PRIORITY WATERSHEDS

In 2000 Environmental improvement projects will be underway in 350 high priority watersheds as a result of implementing activities under the CWAP.

Performance Measures:**FY 1999****FY 2000**

High priority watersheds in which environmental improvement projects are underway as a result of implementing activities under the CWAP.

350 Watersheds

Baseline: Through their Unified Watershed Assessments, states have identified 815 high priority watersheds. One major facet of restoration and protection work will be nonpoint source efforts. To measure progress against this goal, EPA will track the number of watersheds receiving the additional CWA Section 319 grant funds provided under the CWAP. The first of these funds are being awarded in FY99 so the current baseline for this goal is zero.

WETLAND AND RIVER CORRIDOR PROJECTS

In 2000 Working through the Five Star Program, EPA will have cooperated on and supported wetland and river corridor projects in 210 watersheds. (Supports CWAP)

In 1999 EPA will provide funding to restore wetlands and river corridors in 30 watersheds that meet specific "Five Star Project" criteria relating to diverse community partnerships (for a cumulative total of 44 watersheds).

Performance Measures:**FY 1999****FY 2000**

Watershed-/community-based wetlands/river corridor restoration projects funded by EPA's Five Star Program.

210 Projects

Watershed-/community-based wetlands/river corridor restoration projects funded by EPA's Five Star Program.

30 Projects

Baseline: As of September 1998, EPA cooperated on and supported 14 wetland and river corridor projects through the Five Star Program.

Research**SURFACE WATER LIFE SUPPORT FUNCTION IDENTIFICATION**

In 2000 Identify the primary life support functions of surface waters that contribute to the management of sustainability of watersheds.

Performance Measures:**FY 1999****FY 2000**

Research strategy document to determine the impact of landscape changes on wetland structure and function.

1 strategy

Baseline: Performance Baseline: Research is needed to improve our understanding of the factors that affect ecosystem sustainability. Development of "formal" baseline information for EPA research is currently underway.

CONCEPTUAL FRAMEWORK FOR WATER QUALITY IMPAIRMENT

In 1999 EPA will provide data and information for use by states and regions in assessing and managing aquatic stressors in the watershed, to reduce toxic loadings and improve ecological risk assessment.

Performance Measures:**FY 1999****FY 2000**

Develop and provide a research strategy for integrating economic assessment with ecological risk assessment of multiple aquatic stressors applied at two locations.

30-SEP-1999

Baseline: Performance Baseline: There is a need to move toward a more holistic approach to watershed management through the development of diagnostic tools. Development of "formal" baseline information for EPA research is currently underway.

VERIFICATION AND VALIDATION OF PERFORMANCE MEASURES

The measure of designated use-support for assessed waters depends on data provided to EPA pursuant to Clean Water Act Section 305(b). This requires each state, territory, interstate water commission, the District of Columbia and participating Tribes to develop a program to monitor the quality of its surface and ground waters and prepare a report describing the status of its water quality.

EPA provides guidance to help ensure the quality of data submitted. With the assistance of the states, participating tribes, and other jurisdictions, EPA will update national guidance (scheduled for the fall of 1999) for the 2000 Section 305(b) report submission. This guidance delineates the water quality elements for update, as well as provides direction to ensure consistency and comparability of

the water quality monitoring and assessment data. While state 305(b) assessments provide an adequate representation of individual states water quality conditions, the Agency recognizes that differing processes and methods among states can result in varying depictions of the nation's water quality. The Agency intends to address this issue in early 1999 by convening a national 305(b) consistency workgroup. The Water Body System (WBS) defines and tracks the data elements at the water body level and summarizes at various scales. The WBS provides coding guides with technical instructions for data users. The guidance describes annual electronic protocols for submission of the water quality data.

Some performance measures are expressed as the completion of explicit tasks. Verification of

these measures will require the objective assessment of completed tasks by program staff and management. Those measures for which data verification and validation are not at issue include: number of states electronically submitting 305(b) information; completed CCMPs; number of states with marine debris monitoring programs; number of states submitting 303(d) lists; number of TMDLs scheduled for completion; completion of the Watershed Restoration Progress Report; number of ocean disposal site designation actions; number of states developing wetlands health assessment programs; and number of wetlands/river corridor restoration projects supported.

Performance measures in the Chesapeake Bay Program are verified through direct monitoring or through requirements of state grants, i.e., grant deliverables. For example, the number of submerged aquatic vegetation (SAV) acres in the Bay is measured directly by aerial photography and photo interpretation via a grant and scope of work with explicit guidelines for collection of the photography. Similarly, the number of oyster reef acres is accomplished and verified through restoration grants requirements for follow-up monitoring. The remaining performance measures are monitored by the respective state agencies and reported as grant deliverables. All data must be documented according to the requirements in the Chesapeake Bay Grant and Interagency Agreement guidance which provides detailed QA/QC procedures for both data collection and submission.

The Gulf of Mexico Program's performance evaluation process adheres to the Quality Assurance/Quality Control Plan of the Office and those of the participating Federal departments and agencies. Additionally, the Gulf Program has organized a Scientific Review Committee of regional experts (both public and private) that assist in the review and verification of the environmental analyses and performance evaluations administered by the Program.

Research

EPA has several strategies to validate and verify performance measures in the area of environmental science and technology research. Because the major output of research is technical information, primarily in the form of reports, software, protocols, etc., key to these strategies is the performance of both peer reviews and quality reviews to ensure that requirements are met.

Peer reviews provide assurance during the pre-planning, planning, and reporting of environmental science and research activities that the work meets peer expectations. Only those science activities that pass agency peer review are addressed. This applies to program-level, project-level, and research outputs. The quality of the peer review activity is monitored by EPA to ensure that peer reviews are performed consistently, according to Agency policy, and that any identified areas of concern are resolved through discussion or the implementation of corrective action.

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STATUTORY AUTHORITIES

Clean Water Act (CWA)

Safe Drinking Water Act (SDWA)

Marine Protection, Research and Sanctuaries Act (MPRSA)

Ocean Dumping Ban Act of 1988

Shore Protection Act of 1988

Clean Vessel Act

Water Resource Development Act (WRDA)

Marine Plastic Pollution, Research and Control Act (MPPRCA) of 1987

National Invasive Species Act of 1996

Coastal Wetlands Planning, Protection, and Restoration Act of 1990

North American Wetlands Conservation Act

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

Toxic Substances Control Act (TSCA)

Resource Conservation and Recovery Act (RCRA)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Clean Air Act Amendments (CAA)

Pollution Prevention Act (PPA)

Strategic Objective: Reduce Loadings and Air Deposition

By 2005, pollutant discharges from key point sources and nonpoint source runoff, will be reduced by at least 20% from 1992 levels. Air deposition of key pollutants impacting water bodies will be reduced.

Key Programs

(Dollars in thousands)

	FY 1999 Enacted	FY 2000 Request
Rural Water Technical Assistance	\$3,095.0	\$456.0
Effluent Guidelines (CWAP)	\$22,365.8	\$23,193.0
NPDES Program (CWAP)	\$35,142.8	\$46,338.8
State Nonpoint Source Grants (CWAP)	\$200,000.0	\$200,000.0
National Nonpoint Source Program Implementation (CWAP)	\$15,476.7	\$15,198.8
Clean Water Action Plan-Related Research	\$0.0	\$213.4
Water Infrastructure:Clean Water State Revolving Fund (CW-SRF)	\$1,350,000.0	\$800,000.0
Water Infrastructure: Alaska Native Villages	\$30,000.0	\$15,000.0
Water Infrastructure:Boston Harbor	\$50,000.0	\$0.0
Water Infrastructure:Bristol County	\$2,610.0	\$3,000.0
Water Infrastructure:New Orleans	\$6,525.0	\$10,000.0
Watershed Research	\$8,376.1	\$8,692.0
Sustainable Development Challenge Grants*	\$0.0	\$0.0
Urban Environmental Quality and Human Health	\$0.0	\$0.0
Project XL	\$173.7	\$175.4
Common Sense Initiative	\$0.0	\$960.9

* Effective in the FY 1999 Enacted budget process, resources for the Sustainable Development Challenge Grants were transferred to Goal 8.

Annual Performance Goals and Measures

SECONDARY TREATMENT OF WASTEWATER

In 2000 Another two million people will receive the benefits of secondary treatment of wastewater, for a total of 181 million people.

In 1999 Another 3.4 million people will receive the benefits of secondary treatment of wastewater, for a total of 179 million.

Performance Measures:	FY 1999	FY 2000
Additional people who will receive the benefits of secondary or better treatment of wastewater	3.4 M People	2 M People
Baseline: In July 1998, 175.5 million people were receiving secondary treatment of wastewater according to data developed from EPA's Clean Water Needs Survey Database and the Permits Compliance System.		

TOXIC CONVENTIONAL INDUSTRIAL POLLUTANT DISCHARGES

In 2000 Industrial discharges of toxic pollutants will be reduced by 4 million pounds per year (a 14% reduction) and conventional pollutants will be reduced by 388 million pounds per year (a 9% reduction) as compared to 1992 discharges when considerations for growth are considered.

Performance Measures:	FY 1999	FY 2000
Reduction in loadings in PCS for conventional pollutants for facilities subject to effluent guidelines promulgated prior to 1998, as compared to 1992 levels.		388 Million Pounds
Reduction in loadings in PCS for toxic pollutants for facilities subject to effluent guidelines promulgated prior to 1998, as compared to 1992 levels.		4 Million Pounds
Baseline: EPA is working to establish the 1992 baseline from data in the Permits Compliance System (PCS). Current data on loadings are incomplete for some point sources. EPA will augment its data with modeling while it collects more and better information on pollutant loading reductions throughout 1999.		

NPDES PERMIT REQUIREMENTS

In 1999 More than 220 communities will have local watersheds improved by controls on combined sewer overflows and storm water.

Performance Measures:	FY 1999	FY 2000
Communities that will have local watersheds improved by controls on CSOs and stormwater	220 Communities	
Baseline: By June 1998, permits for 585 of 900 CSO communities were based on EPA's 1994 CSO policy. As of March 1998, 72% of major permits were covered by a current NPDES permit (PCS data is current review to improve data quality. This review is likely to result in a change to this baseline in FY00 targets). As of January 1992, 1,900 CAFOs were covered by permit nationwide; determining the number of expired permits is part of the CAFO strategy. By March 1999, EPA will begin semi-annual reporting of storm water sources associated with industrial activity, construction sites over 5 acres, and designated storm water sources covered by a current NPDES permit. By January 2000, EPA will establish semi-annual reporting for NPDES permits issued for new hardrock mines.		

NON-CONVENTIONAL INDUSTRIAL POLLUTION DISCHARGES

In 2000 Industrial discharges of non-conventional pollutants will be reduced by 1.5 billion pounds per year (a 7% reduction) as compared to 1992 discharges when considerations for growth are considered.

Performance Measures:	FY 1999	FY 2000
Reductions in loadings in PCS for non-conventional pollutants for facilities subject to effluent guidelines promulgated prior to 1998, as compared to 1992 levels.		1.5 Billion Pound
Baseline: EPA is working to establish the 1992 baseline from PCS data in the Permits Compliance System (PCS). Current data on loadings are incomplete for some data sources. EPA will augment its data with modeling while it collects more and better information on pollutant loading reductions throughout 1999.		

NONPOINT SOURCE PROGRAM UPGRADES

In 1999 In support of the Clean Water Action Plan, 10 additional states will upgrade their nonpoint source programs, to ensure that they are implementing dynamic and effective nonpoint source programs that are designed to achieve and maintain beneficial uses of water.

Performance Measures:	FY 1999	FY 2000
States & territories that have an upgraded NPS program (incorporating the 9 key elements outlined in national grant guidance), thereby ensuring implementation of an effective program.	10 States	

Baseline: In 1998, 2 states upgraded their nonpoint source programs.

Research

REDUCE LOADINGS AND AIR DEPOSITION

In 2000 Develop modeling, monitoring and risk management methods that enable planners and regulatory officials to more accurately characterize receiving and recreational water quality and to select appropriate control technologies.

In 2003 Deliver support tools, such as watershed models, enabling resource planners to select consistent, appropriate watershed management solutions and alternative, less costly wet-weather flow control technologies.

Performance Measures:	FY 1999	FY 2000
By 2000 Model Linking Urban Stormwater Management Models and Geographic Information System (GIS).	30-SEP-2000	
Link urban stormwater management models to a geographic information system.		1 interface

Baseline: EPA OST developed BASINS using hydraulic simulation program-Fortran (HSPF), a model that poorly describes the urban watershed. This project will emphasize the positive features of BASINS, using the EPA-developed data in BASINS where feasible, to link the EPA SWMM model to a Geographic Information System (GIS). This link is important to allow future compatibility with BASINS as total Maximum Daily Loading (TMDL) calculations begin to more fully incorporate the urban loads. This project will result in a geographical-based, user-friendly interface to accomplish the above. GIS data is quickly becoming the globally-accepted database of choice for integration to most modeling programs.

VERIFICATION AND VALIDATION OF PERFORMANCE MEASURES

Performance data related to NPDES permits will be tracked largely through the Agency's Permit Compliance Systems (PCS) database which is managed by the Office of Enforcement and Compliance Assurance (OECA). Data is entered into PCS by the Regions, states and tribes. Regions, states and tribes have entered extensive information about permittees such as effluent limits, discharge monitoring report measuring data, compliance schedules, and so on, and this information can be used as a baseline. Data entered into this system by the Regions and states and tribes is subjected to data entry quality assurance (QA) procedures to verify that the information is consistent with facility-provided information. Quality assurance of facility-provided information is provided by OECA through programs such as facility inspections.

PCS offers EPA, state and tribal managers an effective tool to validate the effectiveness of our performance in meeting these goals and measures. The system includes additional QA features related to discharge data, including software capable of rejecting gross data input errors, and Quality Management Plans with data criteria. Performance data on CWSRF management will be compiled by EPA's Regional offices through interaction with the states. A limitation on the use of PCS is that it is not very user-friendly, because it was developed a decade ago. However, the database is in the process of being updated to make it more user-friendly, and to make it available to anyone who wants to use the system, not just EPA, states, and tribes.

The Agency's progress toward the goal of clean and safe water can be measured in part by the extent to which point source and nonpoint source (NPS) pollutants are discharged into the Nation's waters.

Our longer-term measurement of NPS discharges will involve analyses of current versus baseline loading estimates conducted by the U.S. Geological Survey and the Department of Agriculture. Since states are the primary implementers of NPS programs and policies, the extent to which states have upgraded their nonpoint source programs to reflect recent guidance will serve as an effective

surrogate for measuring progress toward our NPS reduction targets. State program upgrades will be measured by evaluating each state's explicit short- and long-term goals and objectives and their associated indicators that demonstrate progress. EPA will conduct reviews and evaluations of the nonpoint source documents submitted by state agencies describing the nine key elements required to upgrade their nonpoint source management programs. In addition, the Agency will increase emphasis on monitoring and assessment of nonpoint source impacts in order to ensure achievement of long-term goals and objectives.

Each of the NPDES goals/objectives is based on results expected from the successful implementation of program requirements. The goals/objectives are indicators of NPDES performance and are of high quality. However, the pollutant loading reduction goal is based on estimates of removal to be achieved through the implementation of new effluent limitation guidelines for industrial discharges. This goal assumes that the new guidelines are included in the permits to which they are applicable. At this point we do not have a full data set supporting this assumption, and must use modeling and sampling to verify that we are meeting the targets.

Data on the promulgation of effluent guidelines and support for existing technology based standards is collected through internal tracking processes in the Agency organizations where the work is performed (no outside reporting is involved for these measures).

Data to support EPA figures for the number of people being served nationally by treatment of wastewater to secondary treatment standards are developed from the Permits Compliance System (PCS) and Clean Water Needs Survey Databases.

Data on the effective functioning of the Clean Water State Revolving Fund (CWSRF) Program are collected largely through state entries into the National Information Management System

electronic database. Performance data on CWSRF management will be compiled by EPA's Regional offices through interaction with the states. Additional data collection and quality control reviews are accomplished through annual EPA Regional reviews of state programs, including financial audits performed by Certified Public Accountants, and annual EPA Headquarters reviews of Regions.

Data on the agency goal to reduce the number of homes in Indian Country with inadequate wastewater sanitation systems, through funding from the CW SRF Tribal Set Aside Program, comes from the Indian Health Service (IHS) automated Sanitation Deficiency System (SDS.) This information is reported annually by the IHS 12 Area Offices to the national SDS system. IHS provides summary reports on EPA-funded wastewater treatment projects to EPA Headquarters and Regional Offices. IHS asserts that, annually, at two levels in the organization, it reviews all data for uniformity of reporting and project scoring before submitting it to EPA.

Data measuring the effective functioning of the Colonias Assistance Program are collected via quarterly reporting by EPA Region 6, based on reports from Texas and New Mexico. Data Quality Assurance in Texas is performed by the Texas Water Development Board via periodic Colonia inspections and reports to EPA Region 6. The New Mexico Environment Department reviews the quality of its Colonias data before reporting to EPA Region 6.

Data on the effective functioning of the Biosolids Beneficial Reuse Program have in past years been collected via the Permits Compliance System which is maintained for other purposes. The agency has now developed the Biosolids Data Management System (BDMS) to provide the information needed. BDMS is designed to permit data entry by local wastewater/biosolids management agencies; however, states and EPA Regional offices will initially enter most data. BDMS is equipped with internal checks and

controls to flag and reject inaccurate and inconsistent data.

Data on the effective progression of the closeout of Clean Water Act Title II (construction grants) projects and special project STAG grants are collected via semi-annual reporting by EPA Regional Offices, supported by periodic EPA Headquarters reviews of Regions. Quality Assurance/Quality Control of data is performed through a virtually continuous EPA Headquarters review of progress via cross-checks of required regular and ad-hoc reporting, and via Headquarters visits and calls to Regional offices.

Data on the effectiveness of the assistance provided, as authorized under Section 104(g)(1) of the Clean Water Act, to wastewater treatment facilities to prevent them from going into non-compliance or returning them to compliance, are collected via semi-annual reporting by EPA Regional offices to EPA Headquarters.

Research

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STATUTORY AUTHORITIES

Clean Water Act

Clean Air Act

Coastal Zone Act Reauthorization Amendments of 1990

Safe Drinking Water Act

Toxic Substances Control Act